

COMPRESSION BUTTON LOAD CELL



- LOW PROFILE
- COMBINED ERROR $\leq \pm 0.042\%$
- IP68 PROTECTION RATING
- 17-4PH STAINLESS STEEL | 1.4542



NOMINAL LOAD (FS)

t	kN	Net weight (kg)	Combined error	ISO 17025	High Temperature -40...250°C	Rated Output (mV/V)
1	10	1.1	$\leq \pm 0.042\%$	(optional)	(optional)	2.0 $\pm 0.1\%$
2.5	25	1.1	$\leq \pm 0.042\%$	(optional)	(optional)	2.0 $\pm 0.1\%$
5	50	1.1	$\leq \pm 0.042\%$	(optional)	(optional)	2.0 $\pm 0.1\%$
7.5	75	1.1	$\leq \pm 0.042\%$	(optional)	(optional)	2.0 $\pm 0.1\%$
15	150	1.7	$\leq \pm 0.042\%$	(optional)	(optional)	2.0 $\pm 0.1\%$
20	200	3.2	$\leq \pm 0.042\%$	(optional)	(optional)	2.0 $\pm 0.1\%$
30	300	3.2	$\leq \pm 0.042\%$	(optional)	(optional)	2.0 $\pm 0.1\%$



TECHNICAL DATA

PRECISION

Rated Output (C_n)	2.0 mV/V ± 0.1 % at FS
Zero Balance	$< \pm 0.05$ %
Combined error	$\leq \pm 0.042$ %FS
Non-linearity	$\leq \pm 0.03$ %FS
Hysteresis	$\leq \pm 0.03$ %FS
Repeatability	$\leq \pm 0.02$ %FS
Creep	$\leq \pm 0.05$ %FS (at 30 min FS)
Temperature coefficient of zero	0.003 %FS/°C
Temperature coefficient of sensitivity	0.003 %FS/°C
Compensated temperature range	-10...+60 °C
Operating temperature range	-20...+80 °C
Reference Temperature	23 °C

MECHANICAL PROPERTIES

Material	17-4 PH STAINLESS STEEL 1.4542
Deflection at FN	~ 0.06 mm

ELECTRICAL PROPERTIES

Bridge configuration	Full Wheatstone bridge, 4-wire
Input resistance	$780 \pm 20 \Omega$
Output resistance	$700 \pm 10 \Omega$
Insulation resistance	$\geq 5\,000\, \text{M}\Omega$ at 100 V
Recommended excitation voltage	5 - 15 V
Cable diameter	5 mm
Cable length	4 000 mm

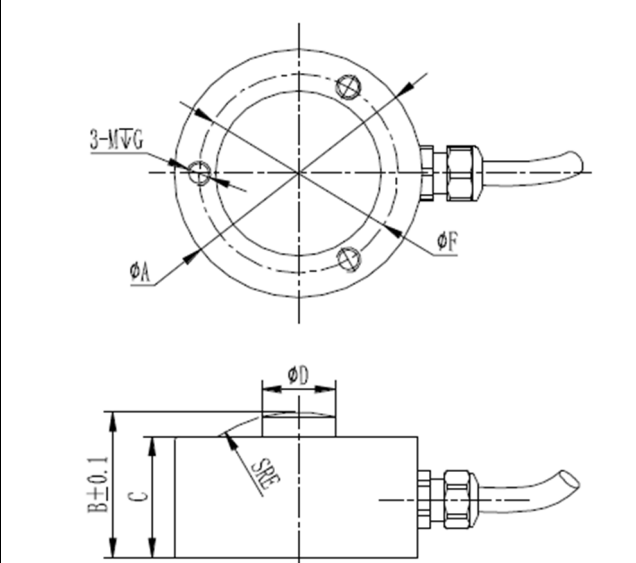
MECHANICAL LIMITS

Service load	120 %FS	Load without any permanent deformation or change in calibration.
Safe overload	150 %FS	The highest static load that may be applied once or briefly without mechanical damage.
Breaking load	> 300 %FS	Load at which permanent deformation or mechanical failure (fracture) occurs.
Max. transverse load (side)	50 %FS	Maximum lateral or shear load that can be applied (e.g. due to misalignment or friction).
Max. permissible dynamic load	70 %FS	For cyclic or oscillating loads, the amplitude should not exceed this load to prevent fatigue failure.

COMPLIANCE AND CERTIFICATION

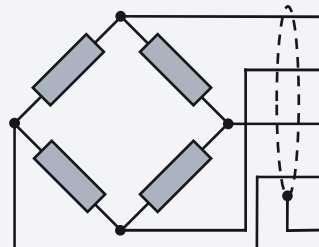
Protection Rating	IP68 (IEC 60529)
Compliance	CE, RoHS, REACH
Calibration	Factory-calibrated, ISO 17025 calibration available on request
HS-CODE	9031.80.80

DIMENSIONS



Cap (kN)	(mm)						
	A	B	C	D	E	F	M
1, 2.5, 5, 7.5	82	44	32	22	120	70	M8x15
15	100	48	35	28	120	80	M10x20
20, 30	126	54	40	35	120	90	M12x20

ELECTRICAL CONNECTION



+ EXCITATION	RED
- EXCITATION	BLACK
+ SIGNAL	GREEN
- SIGNAL	WHITE
SHIELD	

